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Krause, Kathrin ; Freund, Alexandra M

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How to Beat Procrastination – The Role of Goal Focus

Kathrin Krause & Alexandra M. Freund

Department of Psychology, University of Zurich, Switzerland

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Correspondence concerning this article may be addressed to Kathrin Krause or Alexandra M. Freund, Department of Psychology, University of Zurich, Binzmuehlestrasse 14/11, CH-8050 Zurich, Switzerland, e-mail: k.krause@psychologie.uzh.ch or freund@psychologie.uzh.ch

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Abstract

Procrastination, defined as the subjectively aversive inability to initiate or complete the pursuit of a given goal, is a common phenomenon in academic contexts. This theoretical paper presents a dynamic model that centers on the role of goal focus in influencing procrastination during goal pursuit. Our central hypothesis is that focusing on the means of goal pursuit (i.e., adopting a process focus) reduces procrastination, particularly when fear of failure is high. Focusing on the means should decrease the salience of performance outcomes and thereby reduce fear of failure. This, in turn, should facilitate the initiation and maintenance of goal pursuit. In contrast, when means are perceived as unpleasant (high task aversiveness), focusing more on the outcome of goal pursuit (i.e., adopting an outcome focus) should reduce procrastination by directing attention away from the means while highlighting the importance of goal achievement. Furthermore, the model takes account of dynamic contextual factors, particularly the distance to a given deadline.

(157 words)

Key Reference Terms: Procrastination, Goal focus, Self-regulation, Fear of failure, Motivation

How to Beat Procrastination – The Role of Goal Focus

Imagine the predicament of a student facing the typical course requirement of passing the final exam. She knows she has to start preparing fairly soon but, for some reason, she just cannot get started. She tires quickly when trying to read the textbook and gets distracted by other activities such as long-neglected household chores or updating her Facebook page. She feels the pressure to start studying, but simply cannot bring herself to do so. In other words, she is procrastinating.

Procrastination is defined as the tendency to delay the initiation or completion of goal pursuit to the point of discomfort (Howell & Watson, 2007; Solomon & Rothblum, 1984). Procrastination is widespread and, as Schouwenburg and Groenewoud (2001, p. 238) put it: "a certain amount of procrastination belongs to normal behavior." Thus, most people procrastinate at some point in their lives and do so more in some contexts than in others. Because of the high incidence of procrastination in the academic context (Helmke & Schrader, 2000), the present paper examines procrastination in the academic domain.

Why should we care about procrastination? The most compelling reason is probably that procrastination is associated with a number of negative outcomes such as lower subjective and objective task performance and completion (e.g., Beswick, Rothblum, & Mann, 1988; Steel, Brothen, & Wambach, 2001; Tice & Baumeister, 1997; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). Meta-analyses demonstrate a negative relationship between procrastination and grades (Steel, 2007; van Eerde, 2003). Although the association between procrastination and objective performance is of small to moderate size, subjective evaluations of performance might be lowered by procrastination, which, in turn, might affect self-efficacy and fear of failure. This could result in a vicious circle by increasing future procrastination (e.g., Helmke & Schrader, 2000). With regard to affective consequences, Steel et al. (2001) reported a significant correlation between self-reported procrastination and

negative affect. Moreover, the definition of procrastination stresses that a delay of action constitutes a case of procrastination only if it is accompanied by emotional discomfort. Students know that they are worse off by not pursuing the goal as planned but they still cannot bring themselves to do so. This knowledge leads to emotional discomfort and negative affect (Steel, 2007; Wolters, 2003). Schraw, Wadkins and Olafson (2007) found that students experienced fatigue, stress, guilt, anxiety, and a lower quality of life as a result of procrastination (see also Beck, Koons, & Milgrim, 2000; Sirois, Melia-Gordon, & Pychyl, 2003; Tice & Baumeister, 1997).

How can one overcome procrastination? This theoretical paper presents a motivational framework centering on the role of goal focus (*process vs. outcome focus*) for procrastination. More specifically, we investigate whether it is more beneficial for overcoming procrastination to focus on the *means* of goal pursuit (e.g., review lecture notes, discuss questions with fellow students), or to focus on the *outcome* (e.g., think about the importance and consequences of passing the final exam) in order to initiate and maintain goal-relevant action. We present a dynamic model that outlines the change in adaptiveness of process and outcome focus for overcoming procrastination over the course of goal pursuit. Although our model is proposed to hold across different goal domains, in this article we focus primarily on the academic context, as procrastination is a very prevalent phenomenon in this domain.

Previous research on procrastination has identified fear of failure, task aversiveness, and self-efficacy as central predictors of procrastination (e.g., van Eerde, 2000; Wolters, 2003), and has focused on individual differences in these variables for predicting procrastination (Ferrari, Johnson, & McCown, 1995; Helmke & Schrader, 2000; van Eerde, 2003). Less is known about the *processes* that link individual differences to procrastination and their interaction with contextual variables such as task characteristics (van Eerde, 2000) or temporal distance to the goal (Moon & Illingworth, 2005). The central aim of this

theoretical paper is to address this gap in the literature by proposing a dynamic model that relates procrastination to goal focus and includes antecedents of procrastination affecting this relationship as well as consequences of procrastination. The model is dynamic in that it considers the development of procrastination and its changes over time and across contexts. For excellent reviews of current state of the literature on procrastination we refer the reader to Klingsieck (in press), Schouwenburg (1995), van Eerde (2000), or Flett, Blankstein, and Martin (1995).

Defining Procrastination from a Dynamic Perspective

The definition of procrastination as the tendency to delay initiation or completion of goal pursuit implies that procrastination can occur in different phases of goal pursuit. Helmke and Schrader (2000; Schraw et al., 2007) integrated procrastination in the academic context into the Rubicon model of action phases by H. Heckhausen (1989). Heckhausen's model contains four distinct phases: (1) the *pre-decisional phase* (deciding on whether or not to adopt a goal), (2) the *pre-actional phase* (planning goal-relevant action by formulating implementation intentions), (3) the *actional phase* (initiating and maintaining goal-relevant action), and, after having reached the goal, (4) the *post-actional phase* (evaluating the means and the results of the action). Helmke and Schrader assume that procrastination is the result of failures in self-regulatory processes (see Table 1). Thus, in the pre-decisional phase, low self-efficacy beliefs, fear of failure, and self-handicapping can undermine learning efforts. Self-efficacy beliefs are people's beliefs about their capabilities to produce effects (Bandura, 1997). First, these low self-efficacy beliefs may prevent students from evaluating their learning attempts as effective. Second, looming exams may evoke fear of failure and result in delaying the decision to start studying. Third, as a means of protecting their self-esteem, students might postpone the decision to start studying in order to be able to blame a low grade on external factors such as lack of time (i.e., self-handicapping).

The factors contributing to procrastination in the pre-actional and the actional phase are very similar. In the pre-actional phase people plan the "how," "when," and "why" of an action. During the actional phase, these plans are implemented and, if necessary, reviewed and revised. Hence, procrastination can be a result of inadequate planning (Schwarzer, 1999). However, planning is a double-edged sword: Although making concrete plans has been shown to enhance subsequent action implementation (e.g., Gollwitzer & Brandstätter, 1997; Schmitz & Wiese, 1999), making excessive plans can be used as a strategy to delay work on the actual task (Helmke & Schrader, 2000). In the actional phase, procrastination also refers to problems of maintaining goal-relevant actions.

During the course of action, people may interrupt or even stop their goal-relevant activities. Schwarzer (1996) proposes that this might be due to coping doubts. Coping doubts are self-doubts about one's ability to cope with challenges and setbacks during goal pursuit. Coping doubts can lead to a lack of persistence and an engagement in more pleasant or less difficult alternative activities. According to Frank (1989), the feeling of guilt that usually accompanies procrastination helps to compete with falling for these attractive alternatives. Wanting to stop this feeling might be the reason why students start to reengage in goal pursuit. Difficulties in maintaining goal-relevant actions might also be due to interference through fear of failure. As will be explained in more detail below, we posit that focusing on the means rather than the outcome of goal pursuit might help to overcome fear of failure.

In the post-actional phase, one's evaluation of the course of goal-relevant actions and their consequences (i.e., goal achievement or failure) as well as a cost-benefit analysis are important for future goal setting and goal pursuit and will thus also influence future procrastination. For instance, if students repeatedly experience a lack of self-efficacy as a consequence of previous procrastination, subsequent goal setting and goal pursuit are likely to be influenced negatively, especially with regard to self-efficacy beliefs, self-esteem, fear of

failure, and coping doubts. Taken together, Helmke and Schrader's model demonstrates which of the key self-regulatory processes might be disturbed when procrastination occurs during goal setting and goal pursuit.

Goal Focus

The definition of procrastination outlined above includes the presence of a *goal*. However, the literature on procrastination has focused primarily on *person* characteristics or *situational* factors. In contrast, the question of which cognitive *goal* characteristics might be related to procrastination has been largely neglected (for exceptions see e.g., Blunt & Pychyl, 2005). We propose that, in addition to person and situational characteristics, *goal related constructs* such as the cognitive representation of goals primarily in terms of the means *(process focus)* or the outcome *(outcome focus)* might play an important role for procrastination.

Goals can be conceptualized as cognitive representations linking means to desired ends (e.g., Kruglanski, 1996). In other words, goal representations always comprise both means and ends. These two components of goals, however, are not necessarily equally salient for each given goal and at each given point in time (e.g., Freund, Hennecke, & Riediger, 2010; Freund, Hennecke, & Mustafic, 2012). People might focus primarily on the ends or the outcome of goal pursuit (e.g., to receive a good grade on the final exam) (Sansone & Thoman, 2005), or focus primarily on the means or the process of goal pursuit (e.g., reading a textbook or joining a study group). Process focus denotes a stronger cognitive salience of the "*how"* or means of goal pursuit (e.g., "*How* can I get a good grade on the final?"); outcome focus relates to the "*why*" or consequences of goal pursuit (e.g., "*Why* do I want to get a good grade on the final exam?") (Pham & Taylor, 1999). Thus, goal focus refers to the *relative* salience of the outcome compared to the process of goal pursuit. We can imagine the person's goal focus as beaming a flashlight on either the means or the end of goal pursuit (Freund et al.,

2012). Conceptually, then, goal focus constitutes one dimension with the two poles of a predominant focus on the outcome or the process of goal pursuit. A person might have a very balanced representation of a given goal in terms of its means and its consequences, not adopting a *focus* on either of two goal components. Note, that even if a person might habitually tend to adopt one of the two foci when pursuing a goal, goal focus can change depending on such factors as motivational phase, goal orientation towards change versus stability, or age (Freund et al., 2012).[1] In the next section, we elaborate on the theoretical role of goal focus for procrastination.

A Dynamic Model of Procrastination and Goal Focus

Our model centers on the question which of the two goal foci is more beneficial for the initiation and maintenance of goal-relevant actions, for goal achievement, and for subjective well-being. Research concerning the pursuit of difficult goals such as losing weight or starting with regular exercise points to the adaptiveness of adopting a process focus to maintain goal pursuit over time (Freund & Hennecke, 2012; Freund et al., 2010). Similarly, when preparing for an exam, mentally simulating the process of goal pursuit rather than focusing on the outcome is related to better performance on the exam (Pham & Taylor, 1999). However, studies by Zimmerman and Kitsantas (1997, 1999) suggest that the adaptiveness of goal focus for the acquisition and mastery of skills depends on the learning phase. In line with a dynamic view of motivational and action phases, we expect the adaptiveness of process and outcome focus to change over the course of goal pursuit. We will elaborate on the dynamic aspect later.

Let us start with a static "snapshot" of the underlying mechanisms of the relationship between goal focus and procrastination in the actional phase. The main hypothesis of the model is that a process focus is negatively related to procrastination during the non-urgent

actional phase (see Figure 1). Picture again the student who wants to start studying for an exam. There are several reasons why a process focus should help to reduce procrastination:

Concreteness. First, a process focus provides guidelines for concrete means of action (Carver & Scheier, 1995). McCrea, Liberman, Trope, and Sherman (2008) show that people are less likely to procrastinate when a more concrete cognitive representation of a given task is induced. One explanation for this finding is that more abstract or higher-level construals of a task are related to a greater psychological as well as temporal distance (Trope & Liberman, 2003). A greater perceived distance might, in turn, induce people to locate the timing for acting on a goal in the distant future. In other words, when students perceive a goal as temporally distant, procrastination is more likely than when students perceive the goal as proximal and requires immediate action. As proposed by construal-level theory (Trope & Liberman, 2010), representations of a goal in the near future lead to a more concrete cognitive construal involving actions (i.e., process focus) rather than outcomes. If a goal is construed more concretely, and it is highly structured, its perceived proximity increases (Liberman, Trope, McCrea, & Sherman, 2007). In other words, a concrete representation of a goal in terms of the required means rather than its outcomes should increase performance and decrease procrastination (Locke & Latham, 2002; McCrea et al., 2008).

When focusing on the present or the immediate future, the context as well as the actions necessary to reach a goal are at the center of attention, making it more likely that a person will engage in action planning and in forming implementation intentions (e.g., Gollwitzer, 1999), which increases the likelihood of action initiation. For example, creating a schedule that specifies what to study when and how should make it easier for a person to actually engage in these behaviors as well as to accurately monitor the learning process. This kind of planning is often regarded as a learning strategy that is negatively related to procrastination (Howell & Buro, 2009; Wolters, 2003).

Standard of comparison. An outcome focus provides a clear standard for comparing the current with the desired state. According to Carver and Scheier (1998), this should help to keep goal-relevant actions "on track" and, hence, should be adaptive for goal pursuit and achievement. We do not disagree with this important function of adopting an outcome focus but propose a more differentiated perspective regarding the relationship between outcome focus and procrastination: An outcome focus and a comparison of the current and desired state might come at an emotional and motivational cost when the discrepancy between the current and desired state is large. This is particularly true in the early phases of goal pursuit, for example when a student experiences the difference between not having started to study for an exam as the current state and having a good command of the knowledge summarized in the textbook as a desired state. Focusing on the desired end state (i.e., adopting an outcome focus) draws attention to the negative discrepancy between the current and the desired state (Freund et al., 2010). This might lead to negative affect, especially when goal progress is slow (Carver & Scheier, 1998). Negative affect, in turn, might undermine motivation (Custers & Aarts, 2005).

Affect during goal pursuit. If pursuing a given goal is associated with negative affect, one needs to be able to delay gratification until the goal is attained (e.g., Mischel & Ayduk, 2004). For instance, for many students, studying for an exam is less pleasant than going out with friends. In addition, partying offers immediate rewards whereas the fruits of studying might lie in the far future. As pointed out by Howell and Watson (2007, p. 168) "procrastinators reveal a tendency toward temporal discounting, wherein the value of distant, large rewards is downplayed relative to more immediately available, smaller rewards."

In some cases, procrastination may function as a tool for mood repair. Tice and Bratslavsky (2000) showed that, compared to participants in a neutral or positive mood, participants in a sad mood spent less time practicing for an upcoming math test and more time

procrastinating by engaging in other activities. In other words, sad participants attempted at repairing their sad mood by engaging in other activities at the expense of working on a less pleasant but more important task (i.e., preparing for an exam).

Focusing on the means of goal pursuit facilitates the planning of the specific steps necessary to achieve the goal and should thereby increase the utility of goal-relevant action by reducing the delay of rewards (Steel & König, 2006). Not surprisingly, then, a study by Freund et al. (2010) showed that focusing on the means rather than the outcome of goal pursuit was positively related to increases in subjective well-being over time. In addition, enjoying the means of goal pursuit ("the way is the goal-attitude") should reduce procrastination, as it renders the task more pleasurable and hence more likely to be carried out (Harackiewicz, Manderlink, & Sansone, 1984; Locke & Latham, 2002). We assume that a process focus offers more opportunities for positive reinforcement than an outcome focus if goal pursuit itself is perceived as rewarding.

Flexibility after failure. Process focus also offers more opportunities to get back on the wagon after failure (Freund & Hennecke, 2012). More specifically, we propose, that process focus helps to maintain motivation in the face of setbacks such as getting distracted from work. Think again of the students preparing for an exam. As mentioned above, attractive alternatives to studying such as meeting with friends, going to a party, or watching a favorite TV show might lure students away from their desks. Procrastination, a form of giving in to such temptations, might be considered a failure concerning the goal of studying. Adopting a process focus can help mastering such failures during goal pursuit by keeping attention on the means rather than on one's lack of progress towards the outcome. In fact, Hennecke and Freund (2010) showed that a process focus led to better self-regulation and continued goal pursuit when participants experienced failures and problems during goal pursuit. If students fail in employing a specific means, process focus should increase the

likelihood of substituting it with another means instead of procrastinating, thereby offering more flexibility in overcoming obstacles. For example, instead of procrastinating by employing the means of reading a textbook alone at home, the student can replace it by the means of studying in a group together with peers (cf. Kruglanski et al., 2002).

Moderating conditions and influencing factors for goal focus and procrastination

Based on previous research, we take a number of moderating factors into account to understand the relationship between goal focus and procrastination. The literature on procrastination agrees that the main antecedents of procrastination are fear of failure, task aversiveness, and low self-efficacy (e.g., Ferrari, 1991; Rothblum, Solomon, & Murakami, 1986; Schraw et al., 2007; Steel, 2007; van Eerde, 2000). As task aversiveness should be more strongly related to the means of goal pursuit, and fear of failure more strongly related to the outcome, we suggest that the relationship between process focus and procrastination is moderated by task aversiveness and fear of failure (see Figure 1). Furthermore, we include self-efficacy because it refers to the person's evaluation of the means. We hypothesize that process focus is positively related to self-efficacy.

Fear of failure and procrastination. A number of studies have shown that fear of failure is positively related to procrastination (e.g., Haycock, McCarthy, & Skay, 1998; Lay, Edwards, Parker, & Endler, 1989; Solomon & Rothblum, 1984). For example, in a study with a group of college students, Helmke and Schrader (2000) found that trait as well as state procrastination was substantially correlated with state fear of failure (for further findings, see Ferrari & Tice, 2000; Flett, Blankstein, Hewitt, & Koledin, 1992; Vansteenkiste et al., 2009). Haghbin, McCaffrey, and Pychyl (2012) found that the relation between fear of failure and procrastination was positive only for students who perceived their levels of competence as low.

There is some empirical evidence for both causal directions of the relationship between procrastination and fear of failure. On the one hand, procrastination has been found to increase anxiety and depression (Flett, Blankstein, & Martin, 1995; McCown & Johnson, 1991; Milgram & Toubiana, 1999). On the other hand, procrastination can serve as a technique to avoid a fear-inducing stimulus such as studying for a challenging exam (Milgram, Mey-Tal, & Levison, 1998). When one fears the task at hand, procrastinating results in relief from anxiety, which negatively reinforces procrastination behavior (Solomon & Rothblum, 1984). Fear of failure may thus lead to task avoidance (van Eerde, 2000), resulting in a cyclical behavioral pattern in which task avoidance becomes habitual (Brownlow & Reasinger, 2000). Accordingly, Schraw and colleagues (2007) refer to procrastination as a coping strategy.

In general, the empirical evidence suggests a moderate effect size for the impact of fear of failure on procrastination (e.g., Schouwenburg, 1992; van Eerde, 2003; see also Senecal, Koestner, & Vallerand, 1995). In the following, we propose that fear of failure might interact with process focus in models predicting procrastination.

Fear of failure moderates the relationship between process focus and procrastination. We propose that process focus might help to reduce procrastination when fear of failure is high. Outcomes are higher than means in the goal hierarchy (e.g., Austin & Vancouver, 1996; Vallacher & Wegner, 1987). The higher a goal is in the hierarchy, the more likely it is that events threatening goal achievement elicit rumination (Martin & Tesser, 1989). Focusing on the outcome of a goal, such as passing an exam, also makes the possible consequences of failing more accessible and, thereby, intensifies fear of failure. In contrast, focusing on the actions required for passing the exam should bring the means to the foreground and push the possible consequences into the background of attention. By focusing on the means, the goal might seem more manageable. In line with this perspective, Pham and

Taylor (1999) showed that adopting a process focus reduced anxiety about failure in students preparing for an exam, which in turn enhanced exam performance. On the basis of these findings, we suggest that process focus in particularly beneficial in reducing procrastination for students high in fear of failure.

Task aversiveness predicts procrastination. The aversiveness of a task, which refers to how unpleasant people consider a task, is positively related to procrastination (e.g., Blunt & Pychyl, 2000). Senecal, Lavoie, and Koestner (1997) found that task aversiveness was associated with procrastination when participants expected their performance to be evaluated, as is typically the case in academic settings. Blunt and Pychyl (2000) suggest that the anticipated consequences or incentives associated with a particular task also determine how aversive a person considers a task. Hence, task aversiveness can refer to the process of goal pursuing or to the anticipated consequences (e.g., performance evaluation). In our model, fear of failure refers to the aversiveness of the anticipated consequences of an action (e.g., failing an exam), whereas task aversiveness refers to the aversiveness of the means to accomplish a given task (e.g., dislike of studying for an exam). Steel (2007) concluded from his meta-analysis that people procrastinate more often when performing unpleasant than pleasant tasks. Blunt and Pychyl (2000) identified boredom, frustration, and resentment as relatively stable components of task aversiveness. In their study, they found a significant correlation between task aversiveness and procrastination during the actional phase (referring to the Rubicon model by Heckhausen & Gollwitzer, 1987).

Task aversiveness moderates the relationship between process focus and procrastination. If a student perceives the means to achieve a goal as aversive, focusing on them should increase the likelihood of procrastination in order to avoid engaging in unpleasant behaviors. Hence, we assume that process focus increases procrastination when the means are perceived as aversive. When the process of goal pursuit (but not the outcome)

is experienced as aversive, it might actually help to focus on the outcome of goal pursuit. This might increase the perceived importance of achieving the goal and hence motivate a student to swallow the bitter pill of engaging in the unpleasant task to attain the outcome. Consequently, changing from a process to an outcome focus might be more adaptive in certain situations, for example, when the means are perceived as highly aversive and motivation evolves mainly from the outcome (Freund et al., 2012). In other words, the higher a student values the outcome, the more likely s/he engages in the task even if the means are aversive (Eccles, 1983).

Linking self-efficacy, procrastination, and process focus. The literature suggests that self-efficacy is strongly related to procrastination (Ferrari, Parker, & Ware, 1992; Haycock et al., 1998; Klassen, Krawchuk, & Rajani, 2008; Wolters, 2004). Self-efficacy plays an important role in procrastination in at least three ways: First, self-efficacy influences the perception of a goal or task. A student with high self-efficacy believes that s/he has the capacity, the competence, and the resources to manage the task. Schwarzer, Müller, and Greenglass (1999) refer to this as "can-do" cognitions. Second, after engaging in a task, highly self-efficacious people persist longer, recover more quickly from setbacks, and invest more effort in the task (Schwarzer et al., 1999; Schwarzer & Jerusalem, 1995). Third, the experience of being able to ward off distractions and attractive alternatives strengthens a person's self-efficacy (Schunk & Swartz, 1993). As depicted in Figure 1, we suggest that there is a transfer effect: The experience of being able to manage the task by employing one means might increase the person's expectation in being able to successfully employ another means (Bandura, 1977). Adopting a process focus can strengthen self-efficacy by focusing one's attention on the means and thereby making a task seem more manageable than when one focuses on the outcome. Compatible with results from Haghbin et al. (2012),

procrastination should decrease as the pursuit of the goal and its completion become even more likely.

Dynamics of goal focus and procrastination during goal pursuit

Until now, we have focused on the mechanisms underlying the relationship between goal focus and procrastination. As was elaborated in the context of Helmke and Schrader's (2000) dynamic model of procrastination, H. Heckhausen's Rubicon model of action phases (1989; Heckhausen & Gollwitzer, 1987) is particularly well suited for conceptualizing the process of goal setting and goal pursuit over time. Integrating goal focus into the Rubicon model, Freund et al. (2012) provided a dynamic model of goal focus. Following this approach, we take a dynamic perspective on the relationship of goal focus and procrastination over the course of goal pursuit.

In the pre-decisional phase, a student has to decide whether or not s/he wants to adopt a goal. In order to decide if a goal is worth pursuing, the student analyzes the whole situation including the consequences of goal achievement. Blunt and Pychyl (2000) found that in the pre-decisional phase a lack of personal meaning of a project is associated with higher task aversiveness and higher procrastination in the decision to engage in the project. The more the student values the outcome the more likely s/he will engage in goal pursuit (Eccles, 1983). Therefore, Freund et al. (2012) propose that an outcome focus is most likely in this phase. However, as most goals are predefined in the academic context (e.g. as class requirements), we do not elaborate in more detail about procrastination in this phase.

During the pre-actional phase, that is, after having set a goal and before engaging in goal-relevant action, people plan the implementation of intentions in terms of how, when, and where to start (i.e., implementation intentions, Gollwitzer, 1999). Gollwitzer and colleagues (for an overview, see Gollwitzer, 1996) demonstrated in a series of studies that implementation intentions contributed to actually engaging in goal pursuit and also increased

actual rates of goal completion (e.g., Brandstätter, Heimbeck, Malzacher, & Frese, 2003; Koole & Van't Spijker, 2000). Adopting a process focus, in other words, focusing on the goal-related means and actions during the pre-actional phase, should decrease procrastination (Gollwitzer & Brandstätter, 1997).

In the actional phase, people engage in goal pursuit to achieve their goal. According to Heckhausen and colleagues (1987), this phase is associated with a predominant focus on the outcome on a rather abstract level of representation. In contrast, Freund and colleagues (2012) posit that focusing on the outcome might cause a person to overlook good opportunities to implement goal-relevant plans and thus delay goal pursuit. Moreover, based on J. Heckhausen`s (1999) distinction between a non-urgent and an urgent actional phase, we consider that the adaptiveness of goal focus might change over the course of the actional phase (see Figure 2).

When pursuing a long-term goal like writing a comprehensive term paper (compared to a short term goal like reading a paper for the next class), focusing on the activities related to goal pursuit (process focus) might help a person remain motivated more than focusing on the distant outcome (outcome focus) during the non-urgent phase. As elaborated in more detail by Freund and colleagues (2012), the hypothesis of a predominant process focus during the actional phase is consistent with the automotive model by Bargh and Gollwitzer (1994). According to the automotive model, the repeated activation of a goal in a certain situation leads to an association between the goal and situational cues. Subsequently, the situational cues can automatically trigger goal-relevant actions without the person being consciously aware of the respective goal. Goal pursuit, then, does not require conscious awareness of the outcome in order to initiate and maintain goal-relevant actions. This suggests that procrastination is less likely when a person follows certain routines such as always writing on the term paper at the same time and place so as to increase the number of situational cues that

automatically trigger goal-relevant actions. Nevertheless, during the pursuit of long-term goals, one is likely to encounter unplanned situations and new opportunities. As adopting a process focus makes other means more cognitively accessible, it should help a person to react flexibly to new circumstances (Freund et al., 2012). For instance, if meeting with fellow students in a study group is not possible, a student with a process focus should be able to switch to other means more easily, such as using flash cards or practicing multiple-choice questions. Thus, in the non-urgent phase, adopting a process focus should help to counteract procrastination by maintaining goal pursuit even when encountering problems or new situations during goal pursuit (this phase is depicted in Figure 1). However, this might change during the urgent phase, that is, when the deadline for goal achievement (e.g., a final exam) is very near. Deadlines increase a person's effort in goal pursuit. Several longitudinal studies have shown that procrastination decreases when a deadline approaches (Moon & Illingworth, 2005; Pychyl, Lee, Thibodeau, & Blunt, 2000; Schouwenburg, 1995). As Schraw and colleagues (2007) pointed out, people who procrastinate also tend to organize their academic life around deadlines.

The focus on an approaching deadline means constantly comparing the current state with the distant goal. This might increase fear of failure and, thereby, procrastination. Furthermore, if students who still have a lot of time to study focus on the deadline too early, they might perceive goal pursuit as exhausting (after all, one still has a long time to go), which might also result in procrastination. In contrast, concentrating on the means of goal pursuit should reduce fear of failure and, thereby, procrastination (Pham & Taylor, 1999). In the urgent phase, however, the negative consequences of missing a deadline might function as an incentive to organize action in a timely manner (Ariely & Wertenbroch, 2002). Here, approaching a deadline should increase the likelihood that one closely monitors the distance to the goal (J. Heckhausen, 1999), which, in turn, provides a clear comparison standard and

thereby increases the likelihood of goal achievement (e.g., Locke & Latham, 2002). In other words, approaching a deadline should increase the salience of the outcome when actual goal attainment becomes more and more proximal. One of the processes contributing to the differences between the two phases might be temporal discounting. Temporal discounting refers to the observation that large rewards in the distant future are valued less than smaller but immediate rewards (Frederick, Loewenstein, & O'Donoghue, 2002). Thus, if in the non-urgent phase more immediate rewards are present while studying for a distant exam, procrastination is likely to occur. As elaborated above, a process focus dampens this effect because it offers more opportunities for positive reinforcement along the way. In the urgent phase, however, an approaching deadline makes the positive consequences of attaining the goal (and the negative consequences of failing to attain it) more salient, thereby decreasing procrastination. In fact, in one study conducted in our group, we found that deadlines induced a shift from process to outcome focus in university students writing a term paper (Walter, 2009). When a deadline is very close, a person has to overcome all factors contributing to procrastination (e.g., task aversiveness) by focusing his/her attention on the outcome and, thereby, increasing its subjective importance. The perceived or actual negative consequences of missing a deadline may function as a strong incentive to engage in goal pursuit and thereby decrease procrastination (Schraw et al., 2007). This should be even more the case when focusing on the outcome during the urgent phase. As a consequence, adopting an outcome focus when approaching a deadline should increase the monitoring of closing the gap between the actual and the desired state (see Figure 2). Moreover, one could argue that that the goal pursuer can now profit from the self-efficacy s/he has built during the non-urgent phase and is better able to master this last phase of goal pursuit. Hence, the anticipated negative consequences of failing to reach the goal might dominate over all other concerns or task aversiveness and, as a consequence, reduce procrastination.

Taken together, with respect to procrastination, our model assumes that a process focus is more adaptive than an outcome focus in the non-urgent part of the actional phase. A process focus allows a person to be flexible with regard to new opportunities or situational changes (Zimmerman & Kitsantas, 1997). When a deadline approaches and a person enters the urgent phase, the outcome might become more salient (Freund et al., 2012). In sum, with respect to procrastination, it might be most beneficial to shift from process focus to outcome focus when the urgent part of the action phase begins.

Finally, in the post-actional phase, the focus lies on the outcome, as it centers on goal evaluation. Here, procrastination might affect the person's reflection processes and their future decisions. For example, students could procrastinate on checking their grade online or they could delay the decision to sign up for a repetition class to take an exam for the second time. In a study with psychology students, Sirois (2004) showed that procrastination was related to downward counterfactual thinking. Students who found themselves in an anxiety-provoking situation were more likely to procrastinate and, moreover, to avoid thoughts about ways in which things could have been better. Focusing on the outcome in the post-actional phase opens up the possibility to either acknowledge goal success and boost self-efficacy for the next goal pursuit or to disengage from the current goal by engaging in the pursuit of new goals.

Taken together, both procrastination and goal focus are dynamic constructs that depend on the motivational phase. However, the dynamics are not only of a temporal nature but also concern the role of the context in procrastination.

Dynamics of procrastination as action in context

The context and conditions of studying for an exam are highly relevant for the development of procrastination in general (Senecal et al., 1997) and for the relationship between procrastination and goal focus in particular (see Figure 1). As Wolters (2003)

pointed out, “procrastination may be fostered by context-specific factors that promote students’ fear of failure, evaluation anxiety, feelings of incompetence, or task aversiveness” (p. 179). Context-specific factors that help a student to deal with procrastination are, for example, the absence of distractors, social control (by peers, parents, or teachers), daily routines, the amount of detailed planning, and a reward system (e.g., Dietz, Hofer, & Fries, 2007; Schraw et al., 2007; van Eerde, 2000). The degree to which a task is externally structured seems to play a particularly important role. Pychyl (2011) suggested that research on procrastination should take into account notions of responsibility and autonomy. Thus, we will focus on the frequency of feedback during goal pursuit (as a guide for actions) and the degree of autonomy in pursuing a given task (as an indicator of the lack of external structure), and their relation to goal focus. Using the example of a student’s transition from high school to college, we will compare some of the characteristics of high school and college, two learning environments in which procrastination occurs frequently, with respect to academic procrastination.

Feedback frequency and autonomy

At high school, the degrees of freedom regarding studying are much more constrained compared to college (Wild, 2000). These constraints are partly due to a much more regulated study schedule at high school. In Europe, high school students usually attend classes in the morning and in the early afternoon and are expected to do their homework in the late afternoon or evening. The homework is often due the next day, leading to a highly regulated study schedule that helps students to structure their day and to implement daily study routines. Daily routines can enhance goal pursuit and decrease procrastination (Dietz et al., 2007). Furthermore, high school students typically receive frequent and relatively prompt feedback. Latham and Seijts (1999) claim that “feedback functions as a moderator of goal effects because the combination of goals plus feedback is more effective than goals only” (p. 708).

According to goal setting theory (Locke & Latham, 2002), goal-progress feedback informs people about how to best pursue their goals. It motivates them to work on the goal by monitoring their progress and by showing them that sub-goals can be achieved (Schunk & Swartz, 1993). Additionally, temporally close feedback minimizes the requirement for delay of gratification (Howell & Watson, 2007). We assume that the highly structured context of high-school students simulates a constant urgent phase. Thus, the high-school context makes the adoption of an outcome focus more likely and adaptive.

Van Eerde (2000) notes that a certain amount of *autonomy* is a necessary precondition for procrastination. One significant change in study contexts when transitioning from high school to college is that the frequency of feedback decreases substantially while autonomy with respect to how, when, and what to study increases (Raymore, Barber, Eccles, & Godbey, 1999). College students have to attend classes but they might be spread out across the day, sometimes with a number of hours of unstructured time between classes. Moreover, course requirements are due with more time in between receiving the task and having to hand it in. This places higher demands on self-regulation (van Eerde, 2000). Moreover, feedback is typically more delayed, which necessitates greater ability to persist in a task without immediate gratification (Mischel & Ayduk, 2004). During the study process, college students have to maintain their learning motivation over a longer period of time, which requires a number of self-regulatory skills, such as solving problems on their own, persisting in the face of setbacks, and, importantly, warding off possible distractions. In contexts like these, that offer high degrees of freedom and only infrequent external feedback, it might be particularly beneficial for college students to adopt a process focus to counteract procrastination.

Thus, the specific study context plays an important role for the adaptiveness of goal focus in reducing procrastination. In particular, the structuredness of the study context, the

degrees of freedom or autonomy, and the frequency of feedback are likely to influence procrastination.

Summary, Empirical Implications, and Conclusion

This article introduced the concept of goal focus to the investigation of procrastination by presenting a dynamic model of goal focus and procrastination. Our model proposes that goal focus interacts with well-known antecedents of procrastination, namely fear of failure, task aversiveness, and self-efficacy. More specifically, we suggest that a process focus might help by reducing the negative effect of fear of failure during the initiation and maintenance of goal pursuit. Furthermore, we propose that a process focus might increase self-efficacy, which, in turn, is negatively related to procrastination. On the other hand adopting an outcome focus might help coping with task aversiveness and reduce procrastination when the very process of goal pursuit is perceived as aversive. The model currently awaits direct empirical tests. It is our hope that this article will stimulate such empirical research. Although we have focused on procrastination in the academic domain as a prototypical sample case in this article, the model is designed to be general and can be applied to non-academic contexts such as health behaviors or work. Taking an ideographic approach, one could also investigate procrastination regarding people's personal goals, for instance using Little's Personal Projects Analysis (for a similar approach see Blunt & Pychyl, 2005). In the following, we mention the main three empirical hypotheses that can be derived from our model.

First, the model postulates that the cognitive representation of the goal primarily in terms of its process or its outcome could either increase or decrease procrastination depending on the motivational phase, fear of failure, and task aversiveness. Thus, empirical research needs to go beyond person-related variables such as self-efficacy and fear of failure and include the cognitive representation of the goal. Second, the study of procrastination requires

a dynamic perspective on procrastination as changing over the course of goal pursuit (Helmke & Schrader, 2000). Likewise, we posit that the adaptiveness of goal focus varies by motivational phase. A process focus is hypothesized to be more beneficial than an outcome focus when one is attempting to overcome procrastination during the non-urgent actional phase. During the urgent phase (i.e., when a deadline is very close), an outcome focus should increase the importance goal achievement and thereby decrease procrastination irrespective of task aversiveness. To test these hypotheses, research needs to include multiple measurement occasions that repeatedly assess procrastination and its antecedents over time and motivational phases. One possible study that is currently undertaken entails a field study repeatedly assessing students` goal focus, fear of failure, task aversiveness, procrastination, and study behavior when they study for an exam over a longer time period (i.e., from the beginning of the study phase until after the exam). In another approach, we will manipulate students` goal focus to be able to make better inferences about the causal associations between goal focus and procrastination. A third important implication of our model is that the context needs to be considered as well. One very promising way of studying the role of context might be a comparison of the setting of high schools with that of colleges, as they differ systematically on important dimensions (frequency of feedback, autonomy) that might contribute to procrastination.

This paper introduced a theoretical framework focusing on the mechanisms underlying individual differences in procrastination and their interaction with contextual variables. We emphasized the role of the cognitive representation of a goal more in terms of its means (process focus) or its consequences (outcome focus) for procrastination. Moreover, we have stressed the dynamic changes of the role of goal focus for procrastination over the course of the motivational process. Finally and importantly, the model stresses the characteristics of the means (i.e., task aversiveness) and the outcome (i.e., fear of failure) as moderators for the

impact of goal focus on procrastination. Thus, our model integrates individual differences, motivational aspects as well as contextual influences. We maintain that such a complex model is necessary when dealing with such a complex phenomenon as procrastination. With the exception of goal focus, these factors have been considered in previous research on procrastination. However, none of the existing research integrates the construct of goal focus and the interactions of goal focus with task aversiveness and fear of failure into a dynamic model considering the different phases of goal setting and pursuit. Thus, the model offers the possibility to make specific predictions for the likelihood of procrastinating for each point in time during goal pursuit depending on the goal focus, fear of failure, and task aversiveness. This should also help in designing interventions how to beat procrastination.

Footnotes

[1] There are a number of psychological constructs – most notably intrinsic versus extrinsic motivation (e.g., Deci & Ryan, 2000) and mastery versus performance motivation (e.g., Dweck, Chiu, & Hong, 1995) - that have some conceptual relationship with goal focus. For a detailed elaboration of the differentiation of goal focus from these constructs see Freund et al., 2012.

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Table 1

Incorporation of procrastination into Heckhausen's Rubicon Model (1989) according to Helmke and Schrader (2000)

Decision	Action initiation		Deadline
Pre-decisional phase	Pre-actional phase	Actional phase	Post-actional phase
Contributors to procrastination			
Low self-efficacy beliefs	Inefficient time-management strategies	Lack of control processes	Negative evaluation has consequences on subsequent learning process
Fear of failure	Fear of failure	Self-doubt	
Self-handicapping	State orientation	Fear of failure	
Poor goal setting	Excessive planning	Lack of persistence	
		Attractive alternatives	
		Coping doubts	

Figures

Figure 1. Working model: The relation between procrastination and goal focus during the actional phase.

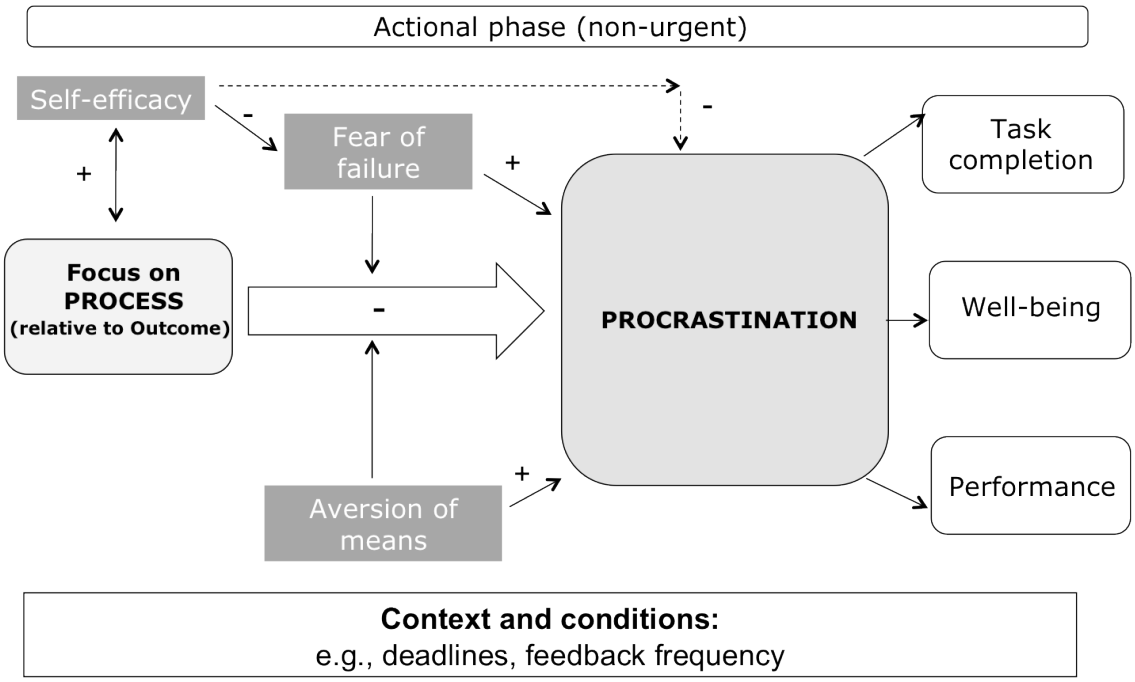

Figure 2. The Shift: The dynamics of goal focus and procrastination during goal pursuit.